

blood without taking into consideration the variation in the blood volume.

This can be determined by means of the hematocrit without resorting to the use of any other complicated method.

A definite mathematical relation exists between the percentage of sugar in the urine and that of the blood. This applies only to individuals with the normal functioning kidneys. In those with defective kidneys the hyperglycemia is usually greater in proportion to the glycosuria. The total content may similarly increase and the percentage remain constant owing to an associated increase in the total volume of the blood, which measures the total blood volume.

Establishing the changes that occur in the proportion of the cells in the blood from time to time permits of computations of the alteration in the blood volume. The percentage of sugar may rise or fall as a result of a change in the volume of the blood caused by bleeding, anaesthesia, sweating or ingestion of fluid without the total content being in any way affected.

The total content may similarly increase and the percentage remain constant owing to an associated increase in the total volume of the blood. It is therefore necessary to make frequent estimations of the blood sugar to properly interpret the findings. Diuresis in Diabetes Mellitus plays an important role in determining the amount of sugar eliminated by the kidneys.

Diabetic Dietetics.—Janney and Czonka have determined the amount of glucose that various meats may yield by means of experiments upon phlorizinized animals. They have found that uncooked beef, chicken, chicken eggs, rabbit and fish yielded 9 to 12 per cent. of sugar. The solid substances of these materials produced from 36 to 48 per cent. glucose. Broiling and frying lead to considerable loss of water with corresponding increase of the percentage of glucose formation. Broiled beefsteak would yield 17.5 per cent. glucose. Flour gives rise to 92.5 per cent. of sugar calculated on an anhydrous basis.

They compute that 100 gm. of bread is equivalent to about 350 gm. of broiled beefsteak. In formulating diets for diabetics it is well to consider the glucose formation that may be derived from protein.

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Rosenow and v. Hess in investigating a severe epidemic of sore throat that occurred in Galesville, Wis., found an etiologic relationship between the streptococcus isolated from the throats of patients and that of milk that was derived from cows suffering from a mastitis. The disease occurred almost exclusively in patients that had consumed the milk. The streptococcus was found in enormous numbers in the material derived by stripping the udders of cows suffering from mastitis as well as those derived from some apparently normal cows. These streptococci were found to be highly virulent in animals and in one monkey produced a typical erysipelas after scratching with a wire that had been dipped into the infected material.

Swabbing the throat with cotton dipped in this milk produced an acute inflammation of the throat with acute enlargement of the lymph glands of the neck.

Heating the milk to sixty degrees for twenty minutes render the material innocuous. Rosenow and v. Hess conclude therefore that virulent bacteria may be present without any demonstrable sign of disease in the udder, and since it is impossible to avoid contamination of the milk in handling, it is important that universal pasteurization of milk be adopted.

DEPARTMENT OF PHARMACY AND CHEMISTRY.

Edited by FRED I. LACKENBACH.

(Devoted to the advancement of Pharmacy and its allied branches; to the work of the Council on Pharmacy and Chemistry of the American Medical Association, and to matters of interest bearing upon therapeutic agents offered to the medical profession. The editor will gladly supply available information on subjects coming within the scope of this Department.)

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

Ferric Cacodylate; Iron Cacodylate.—A ferric salt of cacodylic acid containing from 39.7 to 44.9 per cent. arsenic (As). A grayish-brown powder, soluble in water. The use of ferric cacodylate has been proposed in cases where the effects of iron salts and the mild arsenic effect of cacodylates is desired. Dosage: From 0.015 to 0.1 Gm.

Ampules Iron Cacodylate-Mulford, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm.—in 1 Cc. solution. The H. K. Mulford Co., Philadelphia.

Ampules Iron Cacodylate-Squibb, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. E. R. Squibb & Sons, New York City (Jour. A. M. A., April 7, 1917, p. 1043).

Acetylsalicylic Acid-Squibb.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Non-Official Remedies. E. R. Squibb & Sons, New York City.

Aspirin, L. & F.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Non-Official Remedies. Lehn & Fink, New York City (Jour. A. M. A., April 28, 1917, p. 1261).

Ambrine.—Ambrine is a French, secret preparation that has been on the market for many years. It has recently come into prominence through sensational articles in the lay press. For all practical purposes it is solid paraffin to which some material has been added to make it adhesive and more plastic. For use it is heated until liquid and then applied to open wounds and burns, forming a relatively impervious dressing (Jour. A. M. A., April 7, 1917, p. 1057).

Paraffin Films.—The popular propaganda for "Ambrine" having brought the paraffin film treatment of burns into prominence, Torald Sollmann has instituted experiments to devise a suitable, open formula preparation which is simple and yet meets all requirements. He suggests that surgeons who desire to experiment with the paraffin treatment of burns use simple preparations of known composition. Ordinary paraffin melting at about 50 C. (122 F.) appears to possess practically the mechanical properties of "Ambrine." A mixture containing some asphaltum (asphalt varnish, Trinidad or Bermudez, "asphalt cement" and Texas asphalt were tried) gives a preparation of superior pliability. Other formulas are given and their trial suggested (Jour. A. M. A., April 7, 1917, p. 1037).

Cyanocuprol.—Studies of the effects of "cyanocuprol" on tuberculous processes, carried out by Japanese investigators, have been published. "Cyanocuprol" is stated to be a copper cyanid preparation, the exact composition of which is being kept secret. Even if its identity should become known, the use of "cyanocuprol" is decidedly in the experimental stage (Jour. A. M. A., April 7, 1917, p. 1057).

Corpora Lutea (Soluble Extract).—The Council on Pharmacy and Chemistry reports that "Corpora Lutea (Soluble Extract)," marketed by Parke, Davis

& Co. in the form of ampules for hypodermic administration, is ineligible for admission to New and Nonofficial Remedies, because it is a secret preparation advertised under extravagant claims. No statement of composition is made beyond the indefinite claim that it is an aqueous solution of "soluble Corpora Lutea Extract," each ampule corresponding to 0.2 Gm. desiccated gland. How these soluble products are obtained, whether they represent all the water-soluble principles, or whether some have been eliminated, is not stated. The claims made for the action and uses of the preparation do not make clear the essentially experimental status of the article, and are therefore misleading. Further, the use of this extract is advised not only in functional amenorrhea and the ordinary reflex consequences of physiologic or artificial menopause, but also in conditions where the expectation of benefit cannot possibly be fulfilled (Jour. A. M. A., April 7, 1917, p. 1056).

Pharmacology of Stovaine.—M. I. Smith and R. A. Hatcher find that in toxic doses stovaine produces death in animals by inducing immediate and simultaneous paralysis of the heart and the respiration, the action on each being independent of the other. They find that stovaine disappears rapidly from the blood stream after its intravenous injection. Stovaine is slightly more toxic than novocaine by similar modes of administration and complete recovery does not follow the administration of toxic doses of stovaine so promptly as it does with corresponding doses of novocaine (Jour. Pharm. and Exp. Ther., Jan., 1917, p. 231).

Piperazin and Other Organic Urate Solvents.—From a review of the literature P. J. Hanzlik concludes: there is no reliable evidence to show that piperazin, in small or therapeutic doses, imparts to urine, urate solvent qualities, either by direct addition or after excretion; excessive doses produce a slight but negligible increase in uric acid excretion, the same being effectively produced by sodium bicarbonate or sodium citrate; there is no reliable evidence to indicate that piperazin can remove or prevent urate deposits; diuresis is uninfluenced by even large doses of piperazin and its administration does not materially reduce the acidity of the urine; scientific evidence, though limited, and clinical opinion indicate that piperazin is valueless in gout. Hanzlik also reports that there is sufficient evidence to indicate the worthlessness of the following as urate solvents: quinic acid, quinoline, colchicum, piperidin, Urosin, Lycetol, Sidonal, Lysidin and Urol (Jour. Lab. and Clin. Med., Feb., 1917, p. 308).

Citric Acid and Citrates.—Citric acid and the alkali citrates, potassium citrate and sodium citrate, are oxidized in the body with formation of carbonates and hence tend to increase the alkalinity of the blood. Citric acid and the alkali citrates tend to render the urine less acid and, in large doses, render it alkaline (Jour. A. M. A., April 21, 1917, p. 1206).

Hexamethylenamin in Pyelitis.—I. A. Abt advises caution in the administration of hexamethylenamin in the pyelitis of infants. It should be under continuous observation and its use should be continued for an extended period. The urine should be frequently examined for blood. Abt has more than once seen cases of fatal nephritis which he believes due to the overuse of hexamethylenamin. He advises that, if given to infants under one year of age, it should be given in one grain doses followed by water. This dose may be repeated four or five times daily (Jour. A. M. A., April 14, 1917, p. 1100).

The Luetin Test.—Confirmatory of previous investigations, H. N. Cole and H. V. Parysek find that some non-syphilitics respond positively to the luetin test and that in those non-syphilitics who do not respond spontaneously the reaction can generally be provoked by iodides. They also demon-

strated that the reaction may be provoked by potassium nitrate and potassium bromide. Proving that the potassium ion in the potassium iodide and bromide was not concerned in the reaction, they found that the luetin test may be provoked by sodium bromide, sodium iodide and calcium bromide (Jour. A. M. A., April 14, 1917, p. 1089).

Abolition of the Salvarsan Patent.—The Chicago Medical Society and the St. Louis Medical Society urge the abolition of the Salvarsan patent. The patent should be abrogated, not only because the patentees have not supplied the demand, not alone because they have dictated to the medical profession who should have the drug and how much a physician might have, not alone because of the war with Germany, not alone because of the special needs of the government at this time for the control of venereal diseases, not alone because, as some claim, the patent at Washington does not correctly describe the product, but also because the people who are supplying this product are charging prices that are exorbitant. In order that a sufficient supply, to control the ravages of one of the most serious diseases that afflict humanity, may be assured, it is the duty of Congress to abrogate the Salvarsan patent (Jour. A. M. A., April 31, 1917, p. 1187 and 1203).

Pepsodent.—Wm. J. Gies writes that Pepsodent is a dentifrice widely advertised as a mucin digestant. In a research conducted for the First District Dental Society of the State of New York, Professor Gies and Miss Franke found that the digestive claims were not warranted in any degree. Gies holds that there is about as much common sense in the proposed use of Pepsodent for this purpose as there is in the oral administration of a few grains of Lactopeptine to improve impaired tryptic digestion in the intestines (Jour. A. M. A., April 28, 1917, p. 1278).

Sterling Violet Ray Generator.—This is a small frequency apparatus with some vacuum and possibly other electrodes. The apparatus is not one for producing violet or ultra-violet rays in the scientific meaning of those words. The apparatus will not do the things claimed for it in the advertising booklet which includes the treatment of practically every ailment known to mankind (Jour. A. M. A., April 14, 1917, p. 1141).

PRELIMINARY PROGRAM, AMERICAN PROCTOLOGIC SOCIETY.

Nineteenth annual meeting, New York City, N. Y., June 4th and 5th, 1917. Place of meeting, Hotel Astor. The profession is cordially invited to attend all meetings.

Program, Commencing June 4, 1917.

Executive Council meets at 8 A. M., First regular session at 9 A. M.

Annual address by the President.

"The Place of the Proctologist in a Diagnostic Group."

Alfred J. Zobel, San Francisco, Cal.

Memorial Address—"Our Late Member, George J. Cook, Indianapolis, Ind."

Alois B. Graham, Indianapolis, Ind.

Papers.

1. Adult Rectal Prolapse; Two Cases and a Contrast—Ralph W. Jackson, Fall River, Mass.

2. Adenomyoma of the Rectum—Frank C. Yeomans, New York City, N. Y.

3. Summary Reports of Nine Cases of Pericolic Membrane—John L. Jelks, Memphis, Tenn.

4. Should the Sphincters be Divided?—Rollin H. Barnes, St. Louis, Mo.

5. Neglected Rectal Examination—James A. McVeigh, Detroit, Mich.

6. Enemas and Colonic Flushing as Etiologic